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Enabling Knowledge: Is Liberty a Daughter of Knowledge?

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Abstract

The theme I would like to explore in this presentation concern the multiple linkages between knowledge, civil society, governance, and democracy. I will place this general set of questions into the context of whether or not these linkages are co-determined by an enabling knowledgeability of modern actors -- stressing growing chances of reflexive cooperation in civil society organizations, social movements and perhaps a growing influence of larger segments of society on democratic regimes. But my specific purpose has to be more modest. Access to and the command of knowledge is stratified. I will explore three of these barriers and hurdles of access to knowledge and ask: (1) Is it possible to reconcile expertise and civil society, (2) it is conceivable to reconcile civil society and knowledge as a private good; finally, I will ask, are the social sciences and the humanities a source of enabling knowledge?

In an essay in the *New York Review of Books* (November 18, 2004, p. 38), the molecular biologist Richard Lewontin maintains that "the knowledge required for political rationality, once available to the masses, is now in the possession of a specially educated elite, a situation that creates a series of tensions and contradictions in the operation of representative democracy." Has therefore the shared optimism by the Philosophers of the French Enlightenment, in particular of Condorcet about the role of knowledge not only in overcoming poverty, violence and ignorance but also in building a sustainable democratic society been destroyed (cf. Jones, 2004:16-63)?

By the same token, the English chemistry Nobel laureate Harry Kroto in a recent opinion piece in the *Guardian* (May 22, 2007, Education

1-2) denounces the UK government for wrecking British science and science education. And all of this in the face the "need for a general population with a satisfactory understanding of science and technology [that] never has been greater." Kroto who is now researching and teaching in the United States (and not in England any more) adds, "we live in a world economically, socially, and culturally dependent on science not only functioning well, but being wisely applied."

Moreover, in light of the growing socialization of the production of scientific knowledge, as Immanuel Wallerstein, to cite a social scientist, observes, all but a few individuals are deprived of the "capacity for individual rational judgment either about the quality of the evidence proffered or about the tightness of the theoretical reasoning applied to the analysis of the data. The 'harder' the science, the truer this is" (Wallerstein, 2004:8).

Richard Lewontin's, Harry Kroto's and Immanuel Wallerstein's skeptical comments about the increasing usage of contemporary, especially natural scientific knowledge, not only by governments but as a tool of politics (cf. Pielke, 2007), and yet, the extent to which ordinary citizens apparently are robbed of the ability to rationally enter into discourse about modern science and technology, conveniently sum up the questions about the multiple linkages between knowledge and democracy I want to explore in this lecture. Is it indeed the case that we cannot escape the dilemma of deferring in our judgments to self-selected communities of experts?

On the surface, questions of the relations between knowledgeability and democracy are not a widely discussed set of issues discussed head-on in contemporary social science. However, if one extends one's perspective to what are mediated relations between knowledge, the

economy, civil society and democratic regimes, one constantly encounters its tracks; for example, under the heading of cultural capital and political franchise, access to educational institutions and the social distribution of knowledge, the competitiveness of nations, or social identities and political inclusiveness to mention but a few issues on the agenda of social science and politics today.

I will begin with a rather broad set of questions and claims: As Max Horkheimer emphasized -- in contrast to Karl Marx -- justice or equity and freedom do not mutually support each other. Does this also apply to democracy and knowledge? Or is knowledge a democratizer? Is the progress of knowledge, especially rapid advances a burden on democracy, civil society and the capacity of the individual to assert her will? And if there is a contradiction between knowledge and democratic processes, is this a new development or is the advance of liberal democracies co-determined by the joint forces of knowledge and democratic political conduct enabling one to claim that civil society if not democracy is the daughter of knowledge?

1. Overview

I want to advance my exploration of the multiple linkages between civil society, governance, and democracy in a number of steps. I will ask whether these linkages are co-determined by a growing knowledgeability of modern actors -- stressing mounting chances of reflexive cooperation in civil society organizations, social movements and perhaps a growing influence of larger segments of society on democratic regimes as the result of actor's improved knowledgeability. Access to and the command of knowledge is of course stratified. But in addition to the often underestimated knowledgeability of many citizens in public affairs there is of course the still growing role of scientific knowledge as a capacity for action in politics.

Initially, I will explore couple of barriers and hurdles of access to knowledge and ask: (1) Is it possible to reconcile expertise and civil society, (2) it is conceivable to square civil society and knowledge as a private good and (3) to what extent does the discussion about the role of expertise and knowledge as a private good apply to the case of the social sciences and the humanities.

Are the social sciences and the humanities sources of enabling knowledge in contemporary society, that is, are they creators of new capacities of action, for example, by generating novel as well as practical policy advice?

Each of the central terms I introduced in my brief overview is an essentially contested concept whose meanings give rise to unending debates (cf. Gallie, 1955-1956). I will therefore attempt to clarify next how I plan to use these concepts, especially the notion of knowledge in general and enabling knowledge in particular.

2. The Terms

Knowledge may be defined as a capacity for action. The use of the term "knowledge" as a capacity for action is derived from Francis Bacon's famous observation that knowledge is power (*scientia est potentia*). Francis Bacon suggests that knowledge derives its utility from its capacity to set something in motion. I take it that science not only strives for understanding in the sense of developing models of reality but importantly is also, as a practical matter, interested in how to accomplish things and therefore becomes a model for reality.

I refer to civil society not in its traditional sense as political society or the state but as the arena of active citizens interposed between the state and the intimate forms of life.

The possession of knowledge enhances agency. At the heart of civil society is agency. Agency is the ability of citizens to set goals, develop commitments, pursue values -- and succeed in realizing them. Valuing agency is at the heart of subsidiary or self-government.

In asking about the differential command of knowledge of actors in modern societies, I am exploring -- reformulating the issue of differential access to knowledge -- as the question of mastering one's own life with the aid of the resource knowledge.

3. Introduction

There are of course a large number of more or less rival hypotheses that refer to the reasons for the emergence and persistence of democratic regimes and the strength of civil societies within such social systems; for example, Francis Fukuyama explicates his thesis about the end of

competing ideologies in the last century by stressing, „there are fundamental economic and political imperatives pushing history in one direction, towards greater democracy.“ But other scholars argue that democracies can take a hold in countries that are poor and that democracy therefore does not follow economic development. But as claims for the war in Iraq have shown, democracy is also expected to follow from the barrel of guns.

In contrast to these modern claims, John Stuart Mill, in *The Spirit of the Age* (1831), published after his return to England from France, affirms his conviction that the intellectual accomplishments of his own age make social progress inevitable. But progress in the improvement of social conditions is not, Mill argues, the outcome of an “increase in wisdom” or of the collective accomplishments of science. It is rather linked to a general diffusion of knowledge.

Mill’s observations in the mid-nineteenth century, a period he regarded as an age of moral and political transition, and in particular his expectation that increased individual choice (and hence emancipation from “custom”) will result from a broad diffusion of knowledge and education, strongly resonates with the notion of present-day society -- the social structure that is emerging as industrial society gives way -- as a knowledge society.

John Stuart Mill was a great admirer of the classic study of American Society by Alexis de Tocqueville; as a matter of fact, Mill wrote a review of *Democracy in America* (1835-40) that was published almost at the same time as his *The Spirit of the Age*.

But there are decisive differences between Mill and de Tocqueville in their judgment of democracy, especially of the role of knowledge of its citizens for and in democratic regimes.

De Tocqueville closes his observations about American society by observing that the educational attainment of its citizens is an influential force in the maintaining democracy in America. While Mills has considerable confidence in the independent capacity of enlightenment, education and knowledge and intellectual skills as the necessary condition for the strength of democratic regimes, for De Tocqueville knowledge is the sufficient condition for democracy.

From Mills assumption it follows that intellectuals and scientists play a significant political role in democracies; in the case of De Toc-

queville, it is the ordinary citizen, the enlightened public and his or her immediate political practice that strengthens democratic political systems and checks political power. Without taking side about the specifics of the dispute between de Tocqueville and Mill, I generally concur with their general observation about the importance social role and distribution of knowledge for civil society and democracy.¹

I therefore reject the microphysics of power as elaborated Foucault. As is well known, in his genealogical work, Foucault describes the one-sided shaping of the individual by scientific disciplines such as penology, psychoanalysis etc. and the enormous, micromanaged power of regimentation and measurement in major social institutions. The observations by Foucault on “the undoing of the subject” are based on a view of knowledge that assign too power to knowledge or the agencies in which it is embedded. Knowledge, for example, in *The Archaeology of Knowledge* is anonymous discourse that exercises power over the powerless individual.² Foucault thereby underestimates the malleability of knowledge, the extent to which knowledge is contested and capacity of individuals and civil society organizations to deploy knowledge in order to resist, oppose and restrain the oppression that may be exercised by major social institutions in modern society.

There are various societal restraints that affect the wide dissemination of knowledge in society and therefore hinder the effective role of knowledge for democracy. I will refer to a couple of barriers under the heading of the following questions: (1) it is possible to reconcile democracy and expertise, and (2) it is possible to reconcile democracy and knowledge as property?

¹ For the record, Jean-Jacques Rousseau, Thomas Hobbes and Karl Marx do not share the positive assessment of the role of (scientific) knowledge as a way of rationalizing political action, enhancing democracy let alone happiness or in controlling human passions.

² Foucault’s assertion about the affinity of the powerful and knowledge has a family resemblance to the thesis that an increase in collective human capital, though it „raises the people’s ability to resist oppression,“ also „raises the ruler’s benefits from subjugating them“ (Barro, 1999:S159).

4. Reconciling democracy and expertise

As we have seen, many observers are convinced that the gap between expertise, that is, powerful agencies that harbor expert knowledge and the knowledge of laypersons in modern societies have dramatically and irreversibly widened. On the other hand, it is evident that the social deference, the unquestioned respect and the taken-for-granted authority based on knowledge of the major professions (teachers, doctors, lawyers) at least in modern Western society has declined since at least the 1960s.

Nonetheless, there is still widespread support for the “scientific” perspective of nature of knowledge claims or the enlightenment model, namely that knowledge is universal and universally useful and there is a one-way flow of knowledge from expert to lay public.

With the rising tempo with which knowledge is added, a growing cleavage between those who directly participate in the process of knowledge production and the lay public is noted. The larger public sphere is excluded, so it seems from the social distribution of additional knowledge and the asymmetry between expert knowledge and the public is seen to have serious consequences for the nature of civil society.

I will describe the enlightenment or deficit model in somewhat greater detail: The ease with which one delegates to what the economists call “principles”, of course aside from one’s own specialty, that is to the judgment of experts is seen to have hardened in all social institutions in modern society, not only in science. At the same time, it is widely assumed, for example, in the field of the “public understanding of science” that scientific illiteracy decreases the public’s democratic capacities including of course the possibility of a democratic governance of science.

Large segments of the public have become disenfranchised and disabled from effective involvement in democratic processes. The exercise of citizenship increasingly requires a certain level of scientific literacy. The loss of contact and the epistemic deference is not only the result of a growing cognitive distance between science and everyday knowledge; it is also affected by the ever increasing speed of knowledge expansion based on a growing division of labor in science (scarce cognitive resources even in science) and by the deployment of knowledge as a productive capacity.

The decreasing cognitive proximity increases the political distance from science, for example by restricting public reflection on both anticipated and unanticipated transformations of social and cultural realities resulting from the application of new knowledge. The scientific community shares responsibility for this diminishing intellectual proximity, since the preferred self-image of science as a consensual, even monolithic and monologic, enterprise is increasingly in conflict with both its public role and its own internal struggles about research priorities, as well as the generation of data and their interpretation.

However, on political and moral grounds many groups, constituencies and institutions must be consulted before decisions are made about issues that affect the regulation of new knowledge and indirectly the development of science and technology. It would be misleading to think that the distance from and the loss of contact with science, or the considerable scientific illiteracy in modern societies, is somehow a ‘potentially fatal flaw in the self-conception of the people today’ (as Gerald Holton suggests) and/or signals the possibility of a dramatic collapse in public support for science.

It is more accurate to speak of a state of precarious balance affecting the autonomy and dependence of science in modern society. A loss of close intellectual contact between science and the public is perfectly compatible with both a diffuse support for science in modern society and an assent to legal and political efforts to control the impact of science and technology.

In another sense, however, the loss of cognitive contact is almost irrelevant, and highly controversial; for example, when ‘contact’ is meant to refer to close cognitive proximity as a prerequisite of public participation in decisions affecting scientific and technological knowledge. Such a claim is practically meaningless because it almost requires public engagement in science-in-progress.

In arriving at judgment about expertise and civil society, one needs to take specific contexts into account. As a matter of fact, the “solution” of the social role of knowledge and democracy in modern society does not require a general answer but one that can only be solved case by case (cf. Bohman, 1999:190).

The conditions under which different publics may make sense of specialized knowledge vary

considerably. For example, we live in an age in which science and technology “no longer enjoys the uncontested esteem it had for two centuries as the most certain form of truth – for many the only certain form of truth” (Wallerstein, 2004:7). Thus, rather than treating the relations between expertise and the public as either a series of fixed relations that involve individual, isolated actors, we need to think of the interaction between expertise and the public as mediated by cultural identities as well as changing conceptions of the social benefits of science and technology, the resourcefulness of civil society organizations reconstructing science and technology in distinct ways and all of this effected by contingent political and economic circumstances.

In an age of knowledge politics, that is, efforts to regulate and police new knowledge and technical artifacts, is no longer make sense to view the public as naively resistant toward new capacities to act but as cautious, uncertain and curious about the possible consequences of novel knowledge. Novelty of science and technology based innovation are judged by civil society against the background of their world views, value preferences and beliefs. Take the case of stem cell research, medical genetics or GM foods as a case in point. In short, within the context of knowledge politics which means public discourse about authorizing innovative capacities to act, the balance of power between science and civil society is shifting toward civil society.

None the less, without some element of impersonal trust (see Shapiro, 1987) exhibited by ordinary members towards experts, expertise would vanish. Today’s experts are constantly involved in a remarkable number of controversies. The growing policy field of setting limits to the presence of certain ingredients in foodstuffs, of safety regulations, risk management, surveillance and the control of hazards has had the side effect of ruining the reputation of experts. As long as an issue remains a contested matter, especially a publicly contentious matter, the power and influence of experts and counter-experts is limited; but once a decision has been made and closure achieved, the authority of experts becomes almost uncontested as well.

From the point of view of the scientific community, the lack of cognitive proximity to the general public has advantages and disadvantages. The loss of contact between science and the public can perhaps explain, at least in part, why

the scientific community, in view of its attractiveness and usefulness for corporations, the military and the state, has been able to preserve a considerable degree of intellectual autonomy. Such autonomy, however, is contingent on a host of factors within and without the scientific community. The loss of contact with civil society is a resource for the scientific community. It signals a symbolic detachment and independence that can be translated into an asset vis-à-vis the state and other societal agencies. Science becomes an authoritative voice in policy matters; or it represents, in ideological and material struggles with other political systems, the openness of society. But the cognitive distance also limits the immediate effectiveness of the “voice of science” in civil society organizations as well as in policy matters, and extensive autonomy and independence of science may result in an excessive celebration of “normal” scientific activity and lead to a lack of innovativeness.

5. Reconciling democracy and knowledge as property

In testimony before the U.S. Congress more than a century ago, John Powell, a pioneer in the field of the earth sciences, put his finger on one of the most intriguing features of knowledge, namely “the possession of property is exclusive; possession of knowledge is not exclusive”. In spite of Powell’s thesis, some forms of knowledge are exclusive and become private goods as the result of legal restraints such as patents or copyright restriction attached to knowledge.

Whether knowledge is treated as a public or private good has many noteworthy consequences; for example, it is most likely incremental or new knowledge that is protected. In the context of economic systems but also science, this raises a serious dilemma: The basis of the growth of knowledge is knowledge. If knowledge is protected the growth of knowledge is hampered. But if knowledge is not protected, economist will argue, the incentive to invest in new knowledge disappears; monopoly rights are essential for the growth of knowledge and inventions.

In contrast to incremental knowledge, the general mundane and routinized stock of knowledge consists mostly of knowledge that is non-rival as well as non-excludable, that is, these forms of knowledge may very well constitute

public goods.

Scientific knowledge constitutes one of the most important conditions for the possibility of modernization in the sense of a persistent extension and enlargement of social and economic action that science and not any social system in modern society generates.

I do not want to discuss the contentious issue of trade-offs that may exist between assigning proprietary rights to knowledge and the gains in the overall welfare of society or the trade-offs between treating knowledge as a public good and the loss of welfare for those that cannot reap the benefits from their inventions and discoveries.

Economists, legal scholars and major international organizations such as the World Bank make the case that knowledge must be a (global) public asset. From an economic viewpoint this means that knowledge should lack the characteristics, otherwise typical for economic assets, namely rivalry and excludability. That some forms of knowledge are public goods is least likely the case for additional, that is, new knowledge. And it is additional knowledge that turns a profit.

Thus, the age-old dilemma whether property generates power and thereby fashions human relations or whether it is the other way around continues to be played out even in knowledge societies.

Discourse about the relations between scientific knowledge and democracy, be it about the role of experts or the contested idea that knowledge is property, has been science-centered. Discussion exclusively concentrated on the social role of natural scientific or technical knowledge. In my concluding remarks I like to focus instead on social science knowledge claims and its impact on modern society.

6. Enabling knowledge?

Two models of dealing with scientific knowledge claims generated by the social sciences and the humanities can be identified. The first one which resonates with much of the previous discussion and which asserts a steep gradient of knowledge between science and society is the model of instrumentality. Science speaks to society, and does so with considerable success while society has little if any opportunity to talk back. In short, using the instrumental model as a standard, social

science knowledge itself is the author of its societal success (or failure). More specifically, the instrumentality model stipulates that the practical usefulness associated with social science is linked solely to the solid "scientificity" of such knowledge.

The alternative approach to the social pathways of the use of social science knowledge and knowledge from the humanities is the capacity model. The capacity model stresses the societal influence of the social sciences and the humanities as a process that is driven by the impact of ideas on society. The social science and the humanities are essentially meaning producers.

The social sciences, even if understood as a major if not growing reservoir of meaning that spreads into society, do not have an monopoly on intellectual resources. In contrast to the model of instrumentality, the capacity model stresses also, and this attribute too speaks against a straightforward "social scientification" of world views and mundane meaning in modern society by social science discourse that the agents who "employ" social science knowledge are active agents that transform, re-issue and otherwise re-design social science knowledge.

The capacity model stipulates that social scientific knowledge as an intellectual resource in society is contingently open, complex and thus can be molded in the course of its "travel" from the social scientific community into society. The capacity model further assumes that neither the production nor the application of social scientific knowledge consists of identical reproduction. The capacity model is therefore associated with the possibility that the public may critically engage, using local knowledge resources, social science knowledge and that social science becomes accountable to publics.

7. Concluding remarks

My presentation concentrated on questions concerned with how to gain knowledge in modern society and less on what to do with it. That is the topic of another lecture. The basic claim for the moment however is that democratization in modern societies as knowledge societies increasingly extend to the democratization and negotiation of knowledge claims. We are slowly moving from what if it is has the case, expert rule to a much broader, shared form knowledge

claims governance (cf. Leighninger, 2006).

I assume that scientific knowledge is not only much more malleable and accessible than is suggested in the classical perspective such as the “enlightenment model” (cf. Irwin, 1999) of the relations between science and society. The new sociology of scientific knowledge has familiarized us with the perspective that the production of scientific knowledge is in many ways very similar to other social practices. The boundaries between expertise and everyday knowledge are much less fixed and robust than is often surmised, especially in observations that lament about a growing distance between expert knowledge and the public’s knowledge.

Moreover, what now counts is that we do know enough but what we may know too much. The societal negotiation of what to do with new capacities of knowledge is increasingly a matter not so much dependent on specialized natural scientific and technical knowledge but on enabling knowledge generated by the social sciences and the humanities. General access for civil society to enabling knowledge produced in the social sciences faces many fewer hurdles than the knowledge generated in the natural sciences. Knowledgeability has social externalities through the production a more participatory democracy or citizenship from which civil society organizations benefit most. All of this produces particular challenges, for example, not only in terms of access to social science knowledge but also in the form of new modes of participation. And here civil society organizations will be challenged.

The social space for communication between science/social science and the public already exists. The possibility for democratic negotiation and scientific practice has to be seen as part of a larger social enterprise and a larger social context in which professional scientists as experts and the lay public engage in discourse. Science is an effective social force because it can engage and rely in turn, as can different publics, on civil society organizations and institutions. The case of climate change and AIDS activism are rich examples of such social processes in which the boundaries of expert and lay public are quite malleable (cf. Bohman, 1999).

Finally, we should not be too harsh about the lack of scientific foundations for much of what we treat as knowledge in ordinary life because we tend to get on quite well with such knowledge, at

least most of the time (cf. Schutz, 1946; Hardin, 2003:5).

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